CLAIMS

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- 1. The combination of a growth hormone secretagogue and a p38 kinase inhibitor for use in treatment or prevention of a disease associated with deposition of Aβ in the brain.
- 2. The use, for the manufacture of a medicament for treatment or prevention of a disease associated with deposition of $A\beta$ in the brain, of a growth hormone secretagogue and a p38 kinase inhibitor.
 - 3. Use according to claim 2 wherein the disease is Alzheimer's disease.
- 4. Use according to claim 3 wherein the medicament is for administration to a patient suffering from MCI.
- 5. Use according to claim 4 wherein the patient additionally possesses one or more risk factors for developing AD selected from: a family history of the disease; a genetic predisposition to the disease; elevated serum cholesterol; adult-onset diabetes mellitus; elevated baseline hippocampal volume; elevated CSF levels of total tau; elevated CSF levels of phospho-tau; and lowered CSF levels of A β (1-42).
- 6. Use according to any of claims 2-5 wherein the growth hormone secretagogue is N-[1(R)-[(1,2-dihydro-1-methanesulfonylspiro[3H-indole-3,4'-piperidin]-1'-yl)carbonyl]-2-(phenylmethyloxy)ethyl]-2-amino-2-methylpropanamide, or pharmaceutically acceptable salt thereof.
- 7. Use according to any of claims 2-6 wherein the p38 kinase inhibitor is a compound of formula XI:

$$R^{1}$$
 R^{1}
 R^{2}
 R^{2}
 R^{5}
 R^{5}
 R^{5}
 R^{5}
 R^{5}
 R^{4}
 R^{2}
 R^{3}
 R^{4}
 R^{4}
 R^{2}

or pharmaceutically acceptable salts thereof, wherein Non-Ar-Cyc is

$$\mathbb{R}^7$$
 $(CH_2)_n$
 \mathbb{E}^2
 $(CH_2)_m$

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$$R^{77}$$
 $(CH_2)_{n'-1}$ $(CH_2)_{n''}$ R^7 $(CH_2)_{m'}$ $(CH_2)_{m''}$, or

A is N, O, NH, CH2, or CH;

B is $-C_{1-6}$ alkyl-, $-C_{0-3}$ alkyl-O-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-NH-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-NH-C₃₋₇cycloalkyl-, $-C_{0-3}$ alkyl-N(C₀₋₃alkyl)-C(O)-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-NH-SO₂-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-, $-C_{0-3}$ alkyl-, $-C_{0-3}$ alkyl-S-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-SO₂-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-PH-C₀₋₃alkyl-, $-C_{0-3}$ alkyl-C(O)-C₀₋₃alkyl, or a direct bond;

D is CH, CH₂, N, or NH; optionally A and D are bridged by -C₁-4alkyl- to form a fused bicyclo ring with A and D at the bicyclo cusps;

E¹ is CH, N, or CR⁶; or B and E¹ form –CH=C<; E² is CH₂, CHR, C(OH)R NH, NR, O, S, –S(O)–, or –S(O)₂–; G¹ is N, CH, or C(C₁-3alkyl); G² is N, CH, or C(C₁-3alkyl);

R, R⁷ and R⁷ each independently is hydrogen, C₁-6alkyl– group, C₂-6alkenyl– group, C₄-6cycloalkyl-C₀-6alkyl– group, N(C₀-4alkyl)(C₀-4alkyl)– C₁-4alkyl–N(C₀-4alkyl)– group, –N(C₀-4alkyl)(C₀-4alkyl) group, C₁-3alkyl– C₀-C₀-4alkyl– group, C₀-6alkyl–O–C(O)–C₀-4alkyl– group, C₀-6alkyl– C(O)–O–C₀-4alkyl– group, N(C₀-4alkyl)(C₀-4alkyl)–(C₀-4alkyl)C(O)(C₀-4alkyl)– group, phenyl–C₀-4alkyl– group, pyridyl–C₀-4alkyl– group, pyrimidinyl–C₀-4alkyl– group, pyrazinyl–C₀-4alkyl– group, thiophenyl–C₀-4alkyl– group, pyrazolyl–C₀-4alkyl– group, imidazolyl–C₀-4alkyl– group, triazolyl–C₀-4alkyl– group, azetidinyl–C₀-4alkyl– group, pyrrolidinyl–C₀-4alkyl– group, indanyl–C₀-4alkyl– group, benzothiazolyl–C₀-4alkyl– group, any of the groups optionally substituted with 1-6 substituents, each substituent independently being –OH, –N(C₀-4alkyl)(C₀-4alkyl), C₁-4alkyl, C₁-6alkoxyl, C₁-6alkyl–C₀-C₀-4alkyl–, pyrrolidinyl–C₀-4alkyl–, or halogen;

or R7 together with a bond from an absent ring hydrogen is =0; n' + n" = n; m' + m" = m; n is 1, 2, 3, or 4;

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OH.

m is 0, 1, 2, 3, or 4;

n+m is 2, 3, 4, 5, or 6;

p is 0, 1, 2, or 3;

R¹, R², R³, R⁴, and R⁶ are each independently halogen, C₀-4alkyl, –

5 C(O)-O(C₀-4alkyl), or –C(O)-N(C₀-4alkyl)(C₀-4alkyl);

R⁵ and R⁵⁵ independently is H, CH₃, CH₂CH₃, or absent;

R⁸⁸ and R⁸ each is independently –CN, –C₀-4alkyl, –C(O)-N(C₀-4alkyl)(C₀-4alkyl), –C(O)-O-C₀-4alkyl or 1,3-dioxolan-2-yl–C₀-4alkyl–;

R⁹ is –C₀-4alkyl, or absent; and

any alkyl is optionally substituted with 1-6 independent halogen or -

- 8. A pharmaceutical composition comprising in a pharmaceutically acceptable carrier, a growth hormone secretagogue and a p38 kinase inhibitor.
- 9. A kit comprising a first medicament comprising a growth hormone secretagogue and a second medicament comprising a p38 kinase inhibitor together with instructions for administering said medicaments sequentially or simultaneously to a patient suffering from AD, age-related cognitive decline, MCI, cerebral amyloid angiopathy, multi-infarct dementia, dementia pugilistica or Down syndrome.
- 10. A method of treatment or prevention of a disease associated with deposition of $A\beta$ in the brain comprising administering to a subject in need thereof a therapeutically effective amount of a growth hormone secretagogue (GHS) in combination with a therapeutically effective amount of a p38 kinase inhibitor.